

# LOWER DES MOINES RIVER WATER TRAIL



## THE LOWER DES MOINES RIVER - TRAVELING THROUGH TIME

The Lower Des Moines River flows through lowland forests and along some of Southeast Iowa's interesting historic towns and structures. You may feel like you are moving through time while viewing ancient geology and archaeology evident in the layers of rock outcrops. Large sycamore and cottonwood trees of the lush forest add to the atmosphere of timelessness. Fish and explore from a boat, or get out on sandbars and adjacent public lands. Among the great recreational resources is Lacey-Keosauqua State Park – Iowa's second oldest state park. The park offers great opportunities for hiking, camping, and wildlife viewing along the river, and has its own rich history.

The Lower Des Moines is a meandered stream. That means that private property begins at the high water mark, typically where vegetation begins. The river bed, sandbars and banks up to the high water mark are held in public trust for the people of Iowa. Sandbar camping is allowed on meandered streams.

The US Army Corps of Engineers regulates water levels upstream



## ELDON TO FARMINGTON

in Lake Red Rock, so water levels may be unexpectedly low, or high and fast, depending on upstream management

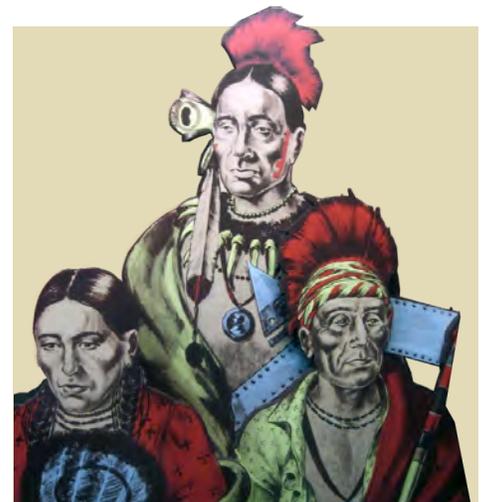


*Thunderbird petroglyph*

Photo Elizabeth Reetz, Office of State Archaeologist

The river and creeks coming into it have long been used by humans. Imagine prehistoric people gathering river mussels and fish. Symbols carved into the sandstone and limestone are further evidence of human activities, and deserve careful preservation.

The loway (Iowa's namesake tribe) were likely descendants of the prehistoric Oneota and are known to have occupied several locations across Iowa, Minnesota, and Nebraska prior to Euro-American settlement. The lowaville village site, which lies just north of the Des Moines River between Eldon and Selma, was occupied from 1765 until the 1820s by as many as 1,600 loway, and is the largest known loway village site. Due to competition for resources and pressure from the Sauk and Meskwaki, the loway moved west. While the loway were not mound builders, several prehistoric era mounds dot the landscape atop bluffs along the entire stretch of the Lower Des Moines River.



University of Iowa Museum of Natural History exhibit *loway leaders portrait* based on paintings by Charles Bird King, left to right: Rantchewaime, wife of White Cloud, White Cloud, Notchimine (No-He art).



Rock cliffs

Cliffs of limestones (upper most), sandstones, and siltstones (lowest) guide much of the river's course through this stretch. They were formed on the ancient ocean floor that once covered Iowa.



Crossbedding in sandstone

Sandstone outcrops may show a herringbone stripe, layers of short grooves at sharp angles next to a layer of different angles. This is evidence of cross-bedding. The tropical seas that covered Iowa had changing currents and shorelines that caused sands to shift, resulting in the sandstones we see today.



Sycamore trees

Sycamores have light green bark marked by white patches on older trees. Their seeds float, helping them spread downstream. Look for young seedlings along mudflats and sandbars.



Sycamore bark and leaf



Bald eagle nest

Bald eagles build large nests that need to be in trees with strong branches. Cottonwood and sycamore trees grow to be the tallest trees in this timbered river valley. Their sturdy branches are an ideal place for the heavy, large nests that bald eagles build.



Ohio buckeye tree  
photo Jim Pease

Ohio buckeye trees are native across southern Iowa. Their large, shiny, dark brown seed marked with a single pale spot resembles the eye of a deer, or a buck's eye. The leaves have five leaflets attached at one point, like wheel spokes.



Great blue herons occur over a large range, from southeast Alaska clear into Central America. In Iowa, they can now be seen along rivers throughout the state. They nest in colonies containing from a half-dozen to over 1,000 nests! Most colonies along Iowa rivers are smaller, ranging from a few nests up to a couple of hundred.

## LOWER DES MOINES RIVER WATER TRAIL



Silver carp

Photo Ritch Nelson, NRCS - Nebraska

Invasive silver carp, an import from Asia, are found in the lower end of the Des Moines River and can pose a threat to boaters because of their leaping ability. When the fish feel vibration from a boat, they jump out of the water ten or more feet into the air and could hit a boater.

### Stream Reach: Eldon to Shidepoke Access at Selma (4.5 miles)

This paddle begins at the cement boat ramp on Water Street in Eldon. This section of the trail is mostly straight with a narrow riparian corridor of sparse trees and flanked closely by gravel roads on both sides for the majority of the route. Banks are steep, cut by the rapid flow of water released from Red Rock Dam above. Shidepoke Access at Selma is well-marked and signed and also has a cement boat ramp and protected eddy for put-in and take-out.

Although this paddle is short and often appropriate for beginning paddlers, the water level and swiftness is determined by releases from USACE Red Rock Reservoir. Paddlers may only be able to determine the river level just prior to putting in.

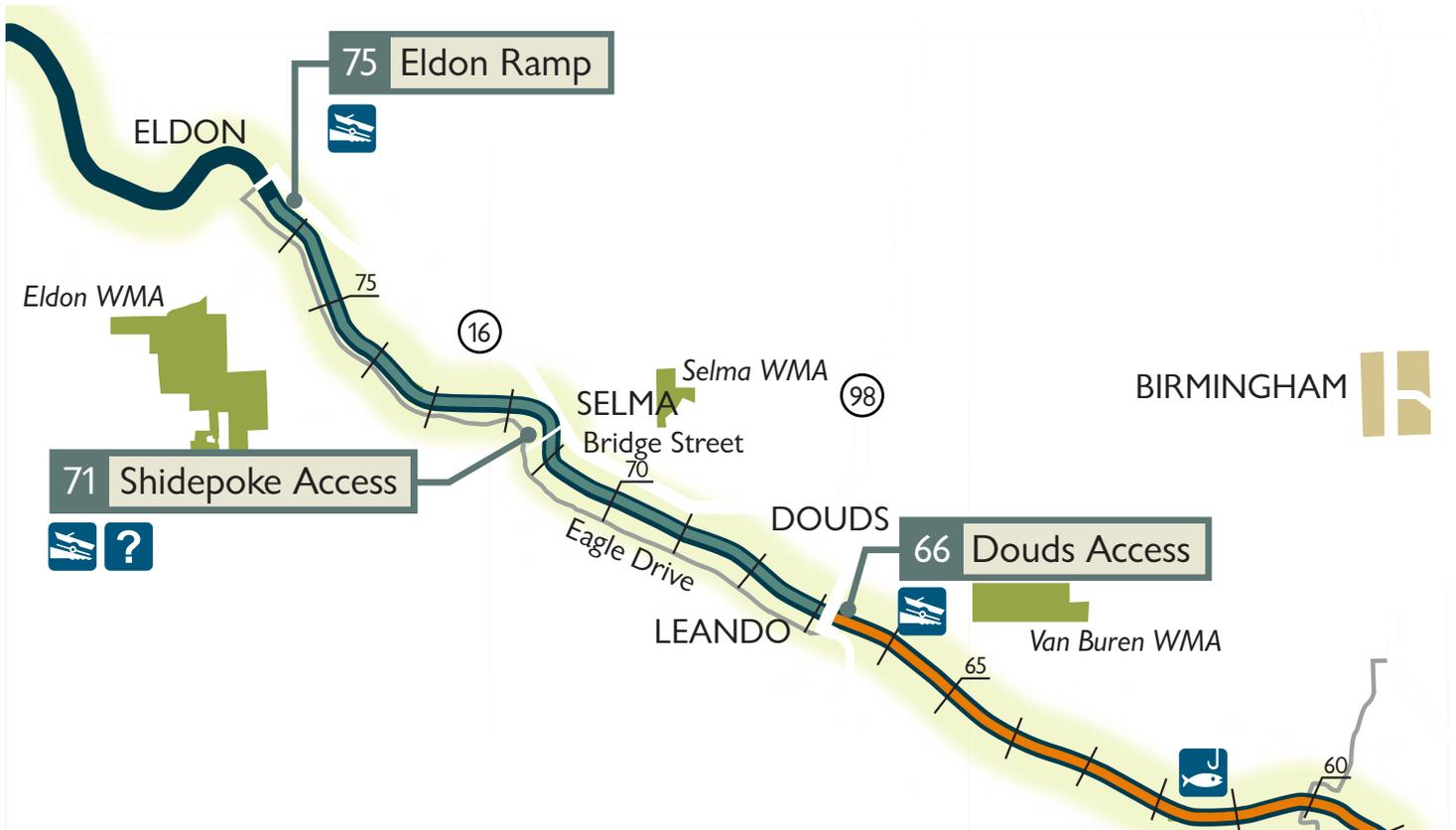
The presence of the invasive silver carp in the entire reach of the Des Moines River below Lake Red Rock may present a hazard for paddlers. These carp are large able to reach up to 60 pounds but more commonly in the 4-15 pound range and leap several feet out of the water. Paddlers need to be aware of their presence.

### Stream Reach: Shidepoke to Douds (4.6 miles)

This section is relatively straight, has a very narrow riparian zone, has agricultural croplands on the floodplain and is flanked for much of its length by gravel roads. Sycamore trees, silver maples, willows and often large cottonwoods are commonly seen along this stretch.

The bridge below the Shidepoke Access contains a large number of cliff swallow nests built of clay. Watch their swooping low over the water to catch insects. The shoreline to the next access is frequented by Canada geese, including a number of nests in the grasses along the river.

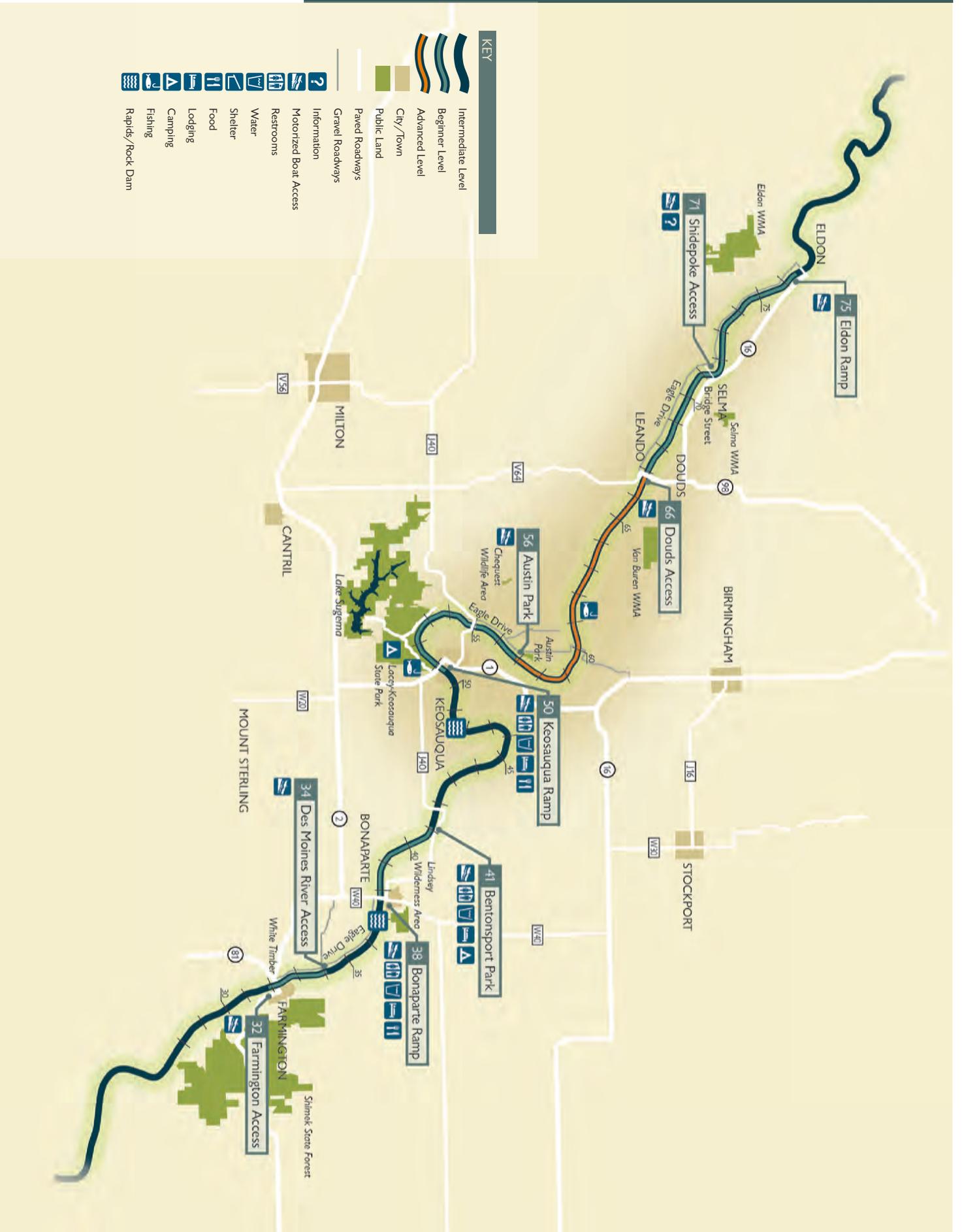
Paddlers stay away from bridge pilings, especially in swift waters. The pilings accumulate logs and other hazards, as well as create currents that can be disruptive, especially to beginning paddlers. A gas pipeline crosses below the river and has signs warning not to dock at that point in the river.



# LOWER DES MOINES RIVER WATER TRAIL

**KEY**

- Intermediate Level
- Beginner Level
- Advanced Level
- City/Town
- Public Land
- Paved Roadways
- Gravel Roadways
- Information
- Motorized Boat Access
- Restrooms
- Water
- Shelter
- Food
- Lodging
- Camping
- Fishing
- Rapids/Rock Dam





CCC built bridge on trail in Lacey-Keosauqua Park  
Photo Cynthia Pease

Many structures within Lacey-Keosauqua State Park were built by the Civilian Conservation Corp in the 1930s using limestone quarried nearby. The limestone formed on the ocean floor that once covered Iowa.

**Stream Reach:** Douds to Austin Park (9.75 miles)

The first half of this ~10 mile stretch is similar to the previous two reaches: mostly straight with a narrow riparian corridor, mostly steep banks, and flanked by roads on each side, close to the river. Below that, however, the river takes on new character. Owing to the geology of the area, the river meets a series of sandstone and limestone hills that are more resistant to erosion than the land up-river, causing the river to bend back and forth, forming several horseshoe bends and 90+ degree bends in the river. The resulting hills and valleys, too steep and rugged for farming, hold diverse woodlands, including some old white and red oaks (150-200+ years old), large shagbark hickories, other hickory species, basswoods, ash and hackberries, and have understories of redbuds, dogwoods and ironwood, together with typical southern Iowa wildlife species. These woodlands give way to large cottonwoods, sycamores, and silver maples along the river, with the occasional stand of willows, box elder, and green ash. All of this makes for a much more interesting paddle than the straight stretches upriver that flow through more heavily agricultural cropland.

Although this section doesn't have many hazards in the river, it may be a bit long for beginning paddlers.

**Stream Reach:** Austin Park to Keosauqua (5.8 miles)

The nearly 2 mile stretch from Austin Park to the bridge at Pittsburg is straight and has a narrow riparian corridor on both sides of the river. Row-crop agriculture, however, gives way to a more residential and/or pastoral environment, together with more cabins. The proximity to the larger town of Keosauqua make the shoreline and benches above it more desirable for homes. The J40 bridge at Pittsburg is heavily populated by cliff swallow nests and hundreds can be seen foraging for insects above the water throughout the summer months.

The remaining 4 miles from Pittsburg to Keosauqua is the horseshoe bend of Lacey-Keosauqua State Park on the south, with agricultural cropland on the floodplain on the north side of the river. Lacey-Keosauqua State Park land on the south is primarily a natural rock face of sandstones, shales, and limestone, with a bench above, approximately 8-10 feet above the water. The land then rises steeply upward, reaching 50-100+ feet above the river and is heavily forested. The area is rich in human and natural history. Lacey-Keosauqua State Park has many trails, a camping area with both electric and non-electric sites, pit toilets, modern toilets and showers, and many historically interesting points of interest.

Being a large and mature woodland, it also contains several bird species not found in many other areas of the county, including several rare warblers vireos, tanagers, and whip-poor-wills, as well as eight of Iowa's nine species of bats. Hazards to avoid in this area are the bridge pilings at Pittsburg and at Keosauqua.

This paddle is appropriate for beginners, assuming the water levels are normal.

**Stream Reach:** Keosauqua to Bentonsport (8.6 miles)

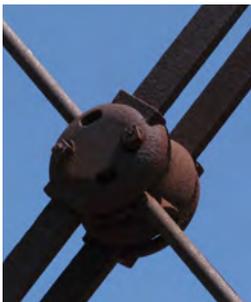
This reach begins at the Keosauqua boat ramp, right near the historic Hotel Manning. The river flows for 8.6 miles around a large horseshoe bend to the northeast of Keosauqua, just as it did to the south of Keosauqua. Large deposits of resistant sandstone and limestone, underlain below waterline by dolomite, are similarly responsible for this river pattern. Where the river bends sharply, sandstone cliffs are present and rise directly next to the river. In some places, a bench of land occurs above the river and the rock cliffs are set back 10-50 feet from the river. These geological deposits, in turn, hold mature oak-hickory and maple-basswood forests in the uplands. Between these large hills, the riparian zone vegetation varies from no trees, to a few scattered trees, to 30-50 foot treed barriers.



Bentonsport footbridge

Just below the Bentonsport access you will float under an old steel frame bridge used only as a foot bridge on a trail between

Bentonsport and Vernon. Built in 1908-09, it was the first major project by the newly formed State Highway Commission. It



is a rare example of pin-connected truss bridges left on the lower Des Moines River.



Riverfront park Photo Villages of Van Buren

The woolen and flour mill buildings in Bonaparte were built in the 1860-1870s. Wing dams, made of brush weighted down with rocks, directed flow to power the earliest mills. Later, timbers were spiked to the limestone bed to form a “crib dam”, part of which is still visible in low water. You may need to carry around or walk boats through the shallow riffle below Bonaparte when water is low.



Bonaparte pottery Photo Villages of Van Buren

Clay deposits along the river have served as an economic resource. Where mud and silt deposits are absent, you may find shards of broken pottery along the river - evidence of local artists at work for many decades. Today, pottery artisans still sell their works in local stores.

Where the floodplain is flat, agricultural row crops dominate, though grassland pasture/CRP/hay exists in some locations. Uplands rise commonly 60-80 feet above the river. Where erosion cuts have made their way through the sandstone cliffs, the resulting narrow valleys create moist and cooler micro-climates where ferns, mosses, and other herbaceous plants can grow that could not otherwise survive in these southern Iowa uplands. Just northeast of the put-in at Keosauqua, there is a rock wall on the east side of the river. This is what remains of an old dam. According to accounts, there was also a grist mill in the same area that blew up.

Due to the roughness of the water just downstream of this location, at lower water levels, this area may have considerable rock obstructions that should be avoided.

**Stream Reach:** Bentonsport to Bonaparte (3.6 miles)

This is a short section, appropriate for beginning paddlers if the water level is not too fast. A ridge just east of Bonaparte steers the river to the southeast for about 1.5 miles where another ridge guides the river back eastward. Like the previous stretches, the river edge is dominated by riparian trees and the floodplain, where broad enough, is farmed. Upland ridges are heavily wooded and cabins dot the shoreline. This short stretch, while not as scenic as the previous stretch, still finds wildlife using the over-water and shoreline areas, and tends to be in a combination of recreational and agricultural land use.

Just after the put-in at Bentonsport, the river passes under an old steelspan bridge that is now maintained as a walk-only span. As with other bridges, the pilings accumulate debris and present a hazard to be avoided.

**Stream Reach:** Bonapart to Des Moines River Access (3.4 miles)

In this short section from Bonaparte to the Des Moines River Access, the river curves to the southeast with a gradual and continuous curve. It is flanked on the south by a narrow riparian corridor of trees and has grassed pastures/fields beyond it in the floodplain to the southwest of an adjacent road. On the north, much of the land in the first half rises more steeply into wooded hills, but this side is also flanked by a road, cabins, and grass fields. Just before the Des Moines River Access (a cement boat ramp maintained by the Van Buren Co. Conservation Board), the floodplain on the southwest side of the river is row-cropped. After the first half-mile of rough water, the remaining 2.9 miles is an easy paddle. Immediately below the put-in at Bonapart, there are the remains of an old dam that may cause a hazard, especially in low water.

Paddlers must move quickly to the opposite side of the river after putting in at the Bonapart Access. Thus, much caution is warranted for beginning paddlers.

**Stream Reach:** Des Moines River Access to Farmington (3 miles miles)

This is a straight and short section of river that runs south from the Des Moines River Access on the west side of the river to the village of Farmington and the Farmington Access on the east side of the river below the Hwy. 2 bridge. This is an easy paddle through what is mostly a residential and agricultural corridor.

Silver maples, sycamores and cottonwoods, oh, my! Three species of trees dominate the lowlands along this stretch of river. Silver maples, sycamores, and cottonwoods are fast-growing deciduous trees that can be seen along many rivers in southern Iowa. Being fast-growing is important in a fast-changing river environment. All produce an abundance of seeds, in hopes that a few will take root. Maple and cottonwood seeds both have wings, of sorts, allowing them to fly on the wind: the helicopter seeds of the maple rain down in

## LOWER DES MOINES RIVER WATER TRAIL



Bridge pier near Farmington

Abandoned bridge piers are found along many Iowa rivers, and often have interesting histories. Stones for abutments usually were quarried close to the river. This bridge may have been a covered railroad bridge at one time.

the late spring and the cottonfills the air in the early summer. Their seeds can be found on both uplands and lowlands as a result, though both are water-loving species. Sycamores, on the other hand, have seeds that float and depend on the river to disperse them. The light green to white bark of the sycamores thus traces the sinuous path of rivers and streams in southern Iowa and stands in contrast to the grays of the cottonwoods and silver maples.

Watch the mud flats and shallows along the shore and you may see dozens of small seedlings sprouting where the river eddies have gathered seeds of these trees. All three have relatively soft wood and readily develop cavities in their trunks and large branches, cavities that provide homes for squirrels, raccoons, owls, wrens, chickadees, nuthatches, and more. Watch for these tree cavities as you paddle this river and you may see other river dwellers peering back!

Photography: *All photographs are attributed to Jim Pease unless otherwise noted.*

### BE SAFE OUT THERE!

Keep your trip enjoyable by following these safety TIPS:

- Pack only essentials and keep them in waterproof bags.
- Check the river water levels and currents before each trip.
- Know the weather forecast, including areas upstream, and stay aware of the weather on your trip.
- Make sure someone knows your planned entry and exit points and estimated times.
- Always wear a properly-fit life jacket.
- Expect overhanging trees, logjams, and other obstacles, such as bridge abutments or big rocks. If paddling around them is not possible, get out and portage around them. Grabbing onto tree branches may capsize your paddlecraft.
- Always portage around lowhead dams. Surface appearance can be deceiving. Undercurrents can be strong enough for drowning.
- If you capsize, remain on the upstream side of your boat to prevent being pinned.
- Dress appropriately for weather conditions (including air and water temperatures), and avoid weather and water conditions beyond your skill level.

### KNOW YOUR SKILL LEVEL!

- **BEGINNER:** Segments are generally less than six miles. Hazards are few and easy to avoid in normally slow-moving currents. Users can easily access these segments from parking areas, and will not need to portage, except to walk a boat around some shallow riffles or to make the going easier around an obstacle.
- **INTERMEDIATE:** Segments are generally less than nine miles. Users should have ability to recognize and avoid hazards in moderate river flow. The need to portage is rare, but users should be able and willing to carry boats and gear a short distance. Access to the river may involve a short portage, and the launch or take-out may be a bit difficult.
- **ADVANCED:** Segments may exceed nine miles. Hazards are likely and often occur in fast-moving water. The need to portage may be frequent or may involve carrying boats and gear a long distance. Access to the river may involve a portage, and the launch or take-out may be from steeper banks or faster moving water.

### BEHAVE AS A GUEST!

- Respect private property. Only use public lands and access points.
- Be considerate of others in your group and on the banks.
- Give anglers a wide berth.
- Never change clothes in public view.
- Never litter. Always pack out trash.
- Do not disturb wildlife.

For more information, visit:

[www.iowadnr.gov/paddlingsafety](http://www.iowadnr.gov/paddlingsafety)

[www.vbcountyconservation.com](http://www.vbcountyconservation.com)

[villagesofvanburen.com](http://villagesofvanburen.com)

**Lacey Keosauqua State Park**  
319-293-3502

**Paddle, Pedal, & More**  
319-592-3220

